

Patent claims

1. The use of a VEGF receptor gene or gene product for producing a preparation for preventing and treating conditions and diseases, in particular arteriosclerosis and ischemia, which are accompanied by overshooting neointimal proliferation, for promoting neovascularization and for supportive therapy in connection with shunts, for the local treatment of areas of damage to the blood vessel endothelium, in particular before, during or after angioplasty, and for restenosis prophylaxis.
2. The use as claimed in claim 1, characterized in that the preparation comprises a KDR-encoding sequence as the VEGF receptor gene and/or KDR (kinase insert domain-containing receptor) as the gene product.
3. The use as claimed in claim 1 or 2, characterized in that the gene/sequence is present in an expression vector, preferably functionally assigned to a promoter.
4. The use as claimed in claim 1 or 2, characterized in that the gene product is assigned to a transport unit, in particular in combination with a transport protein.
5. The use as claimed in one of claims 1 to 4, characterized in that the preparation additionally comprises means for modulating the synthesis, expression and/or stability of a VEGF-receptor-encoding mRNA.
6. The use as claimed in one of claims 1 to 5, characterized in that the preparation comprises

further pharmaceutically tolerated additives and auxiliary substances and/or further pharmaceutical active compounds.

- 5 7. The use as claimed in one of claims 1 to 6, characterized in that the preparation is provided within a device for supplying it or on, at or in an implant, in particular a stent.
- 10 8. The use of a VEGF receptor gene or gene product for preventing and treating conditions and diseases, in particular arteriosclerosis and ischemia, which are accompanied by overshooting neointimal proliferation, for promoting
15 neovascularization and for supportive therapy in connection with shunts, for local treatment of areas of damage to the blood vessel endothelium, in particular before, during or after angioplasty, and for restenosis prophylaxis.
- 20 9. The use of a VEGF receptor gene or gene product as claimed in claim 8 for therapy in balloon catheter-assisted dilatation in connection with constricted coronary blood vessels.
- 25 10. The use as claimed in claim 8 or 9, wherein a VEGF receptor gene is used in an expression vector.
- 30 11. The use as claimed in claim 10, wherein transient expression of the VEGF receptor is induced.
- 35 12. The use as claimed in one of the preceding claims, wherein the VEGF receptor gene or gene product is present in a form in which it is encapsulated by nanoparticles, microparticles or microspheres, in the form of a controlled release system or in the form of a solution.

13. The use as claimed in one of the preceding claims,
wherein the VEGF receptor gene or gene product is
impregnated in or on a stent or stored in an
infiltration balloon catheter or a sideport
5 balloon catheter.
14. A device, in particular stent or catheter, for use
within blood vessels, comprising an effective
quantity of a VEGF receptor gene or a VEGF
10 receptor, or functional moieties thereof having
the same biological effect.